

Amendments to the Specification:

Please replace paragraphs [27], [34], [35], and [36] with the following amended paragraphs:

[27] As shown in Figure 3A, a plurality of micro strip patch antennas 122 are arranged at one side of a dielectric board 121, and an amplifying unit (A) is integrated at the other side of the dielectric board 121, the opposite of the side on which the micro strip patch antennas ~~121~~122 are arranged. That is, by integrating the micro strip patch array antenna and the amplifying unit (A) at one board 121, a loss generated at the transmission line can be reduced.

[34] The DC power transmitted to the transmission line 301 is separated from the RF signal by the bias-T 302 and supplied to the first power supply unit 303a of the active antenna. The first power supply unit 303a supplies the DC power as a driving power to the first amplifier 305 and the second amplifier ~~306~~307.

[35] The RF signal separated from the bias-T 302 is filtered by the first duplexer 304 and inputted to the first amplifier 305 of the transmitter, and the RF signal outputted from the first amplifier 305 is amplified through the first filter 306 and the second amplifier 307 and transmitted to the second duplexer 308. The RF signal transmitted to the second

duplexer 308 is fed to the micro strip patch antenna 122 by way of the antenna feeder 201 (Figure 3B). The micro strip patch antenna 122 transmits the corresponding RF signal in the air.

[36] In case of receiving an RF signal, the transmission process as described above is performed reversely as follows. An RF signal received through the micro strip patch antenna 122 is filtered through the second duplexer 308 and inputted to the third amplifier 309 of a receiving end. The RF signal outputted from the third amplifier 309 is amplified through the second filter 310 and the fourth amplifier 311 and transmitted to the first duplexer 304. At this time, the third and fourth amplifiers 309 and 311 are driven by a DC power supplied to the ~~first~~second power supply unit ~~303a~~303b by way of the transmission line 301, like the first and second amplifiers 305 and 307. The first and second amplifiers 305 and 307 of the transmitter are power amplifier, while the third and the fourth amplifiers 309 and 311 of the receiver are a variable gain low noise amplifier and a fixed gain low noise amplifier. That is, a gain of the third amplifier 309 is varied according to a control signal outputted from the detection controller 350b.